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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/726,833 | 12/03/2003 | Robert J. Desmarais | US020596 | 5542 |
| 24737 | 7590 | 12/15/2004 | EXAMINER | |
| PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510 | | | JAWORSKI, FRANCIS J | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3737 | |

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|---------------------|----------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/726,833 | DESMARAIS, ROBERT J. | |
| | Examiner | Art Unit | |
| | Jaworski Francis J. | 3737 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12032003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[Parenthesized claim number(s) which follow rejection statements pertain to the specific claim or claims being addressed by the immediately preceding rejection.]

I. Rejection Based Upon General Audio/Video Editing

Claims 1 – 3, 11 – 16, 24 – 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azadegan et al (US5612900).

Azadegan et al is directed to particularized technology associated with trade-offs between quantization levels and bit rates during pre-encoding of video for subsequent MPEG compression to optimize for end-use video storage and output rates. However the Examiner is using this patent in overview for Fig. 1A which is representative of an editing workstation system and method of use where a video recording is edited during recording (via 52) or on playback (via

51). Such studio editing might reasonably occur in relation to a medical documentary or medical informational video or a popular film involving a medical topic and therefore meet the preamble requirement for a 'medical imaging system' with no further specificity, whereupon:

a system clock presumably originates in controller workstation 30 or editing workstation 20 such that time-stamp synchronization occurs within digital video capture and storage device 60 concomitant with control of audio interface unit 72-receiving from Sony audio tape players 70a-70d which interface 72 also receives synchronized time codes, see col. 8 lines 48 – 59 and col. 9 line 27 – col. 10 end. The former video capture device is characterizable as an imaging sub-system which captures one or more film images of a patient for a documentary or informational video or of an actor-as-patient in the medical context of a popular film, and the latter audio capture device is characterizable as a sound recording subsystem selecting which track to associate with the film at a given moment.

Alternately stated the Examiner is posing that applicant's base claim is readable against a film editing system in overview with the argument that the 'standard time code format' which associates the tracks must arise from a common chrono time source or elapsed time counter serving as system clock associated with the workstation, where a medical film topic includes a patient or actor posing as a patient. (Claim 1).

Digital storage 22 serves as the final medium for the single audio-video file which is produced, see col. 11 lines 57 – 67. (Claim 2).

The system may alternate between record and playback during the editing, see col. 10 lines 34 – 37. (Claim 3).

Explanatory audio information might reasonably be present in the audio channel of the system concurrent with an imaged clinical lesion or infirmity in the patient contexts stated above, and might reasonably extend to multiple differing statements about a single clinical lesion (e.g. appearance/time course/functional effect) associated with a patient image. (Claims 11 – 13 and 24 - 26).

The editing proceeds under user initiation of controls. (Claim 14).

The Azadegan et al references to a start and stop time would reasonably extent to a film segment or finite time interval during which the video captures the complete clinical view and the registered selected audio epoch serves as an audio clip or snippet accompanying the film segment. (Claim 15)

Either local playback as discussed re claim 3 or final play of the finished video retrieved from 22 would constitute the display and play called for in the claim. (Claim 16).

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Azadegan et al as applied to claim 15 above, and further in view of Jeppesen (US4924387). The former is applied as above, however for purposes of combining Jeppesen one may note that a combined video and audio on a medical topic might include a malpractice proceeding with video of a patient as witness, and microphone audio is combined with video using time-stamp synchronization from a system clock for both subsystems, see col. 4 bottom, and a further feature is provided for audio annotation onto this audio-visual record of

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testimony which is initiated by the court reporter's keystrokes, see col. 9 lines 43 – 57.

Alternately stated, the Examiner is expressing that in certain circumstances one might impose a dictation audio i.e. a form of spontaneous audio annotation onto an edited audio-visual record in order to further inform the record of information pertinent contemporary to the editing and which is digitized into computer memory (Claim 23).

II. Rejection Based Upon Multimedia Ultrasound Image System Data Capture

Claims 1 – 7, 11 – 20, 24 - 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Urbano et al (US6595921).

Urbano et al is directed to an ultrasound imaging system based upon a reprogrammable logic device architecture which facilitates composite (multimedia) data capture, meaning that the definition of an 'image' is broadened to refer to a 'composite image' (meaning scan image + other visual components such as graphics/data/text/measurements – see col. 30 lines 10 - 25 or alternatively meaning such an image of scan and other visual components + audio components such as Doppler audio or voice annotations – see col. 32 lines 5 – 15). In this latter context of 'composite image' which the Examiner is alternatively coining a multimedia data capture to avoid a wrongly limiting visual-only connotation, the audio and video/visual may be separately stored in time registry by virtue of synchronizing line headers and line numbers (cols 21 lines

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26-27 and col. 32 lines 10-12), may be commonly digitized and stored and retrieved together (col. 34 lines 14 – 20) or the time synchronization may be assigned to the CPU (1560) for discharge as a software function controlling audio codec (1540) (col. 34 lines 27 – 39 and Figs. 15 - 16).

The Examiner believes that all three such interpretations centering on are readable under an obviousness argument against the base claims as follows:

Urbano et al teaches a medical composite ultrasound imaging system and method of use including:

A system clock for generating a synchronization signal (the video clock controls scan conversion or outgoing data transfers to RAM, see col. 25 lines 34-37, and the data bus, memory and registers operate in one alternative synchronously with a 29MHz clock, see col. 27 lines 12 – 22. Therefore it is argued that any of the audio – video synchronization alternatives stated above – production of line number and synch headers, control of digitization and entry into memory, or CPU software instruction timing controlling registry effected during audio codec communication with the CPU, would be under synchronizing clock control),

An ultrasound imaging subsystem 22,

A sound recording subsystem (CW Doppler processor 20 or annotating microphone input 1575 to codec 1540)' where the the image and audio data are effectively time-stamped (for example the language of col.34 lines 33 - 35)..

(Claims 1,4, 15, 17).

Digital storage memory of the time-indexed data is available in the system (705) or on hard disk (720) or in 1710, 1720 in the later embodiments. (Claim 2).

Automated playback of the 'composite images' is contemplated, see col. 28 lines 16 – 19 and col. 35 lines 31 – 34. (Claim 3).

In Urbano et al the CW Doppler baseband digitization rate is 80 Khz however the baseband output is merely a fraction of the selected ensonation carrier. (Claims 5, 18).

Doppler audio and ECG are contemplated , see col.19 line 34 heading. (Claims 6 – 7, 19 - 20).

In Urbano et al one or more types of clinical information as per table col. 20 bottom may be linked to the Doppler and/or annotation sound segments during indexing or in the playback mode. (Claims 11 – 13, 16-17, 24 - 26).

Logically the time registry would start when the exam starts, assuming no data is irrelevant. (Claim 14).

Claims 8 – 9, 21 – 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Urbano et al as applied to claim 4 above, and further in view of Finger et al (US5971923) since whereas the former is silent as to addition of other physiologic parameters to the ECG under the 'composite image' scheme, it would have been obvious in view of the latter's physio module 38 to include phono (cardiographic i.e. electronic stethoscope) and respiration in the acquired data set in the former in order to completely characterize the status of the patient. (claims 8 – 9, 21 - 22).

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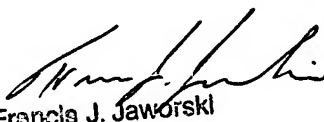
Claims 10, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Urbano et al as applied to claim 1 above, and further in view of Greenberg (US6514201) since whereas the former is silent as to speech recognition and text transcription therefrom, the latter evidences in col. 1 line 62 – col. 2 line 22 that it would have been obvious to extend voice annotation to either direct or macro-based speech transcription translation into computer storage in order to ease the recordation burden on the physician. (Claims 10, 23)..

Anderson et al (US5799310) is directed to a database extender software invention wherein composite medical data is alternatively referred to as complex data or multimedia data, see col. 3 lines 52 – 67.

Any inquiry concerning this communication should be directed to Jaworski Francis J. at telephone number 571-272-4738.

FJJ:fjj

12-11-2004


Francis J. Jaworski
Primary Examiner